

Title (en)

SELF-RETRACTING LIFELINE SYSTEMS AND BRAKING SYSTEMS THEREFOR

Title (de)

SELBSTSTEINZIEHENDE RETTUNGSLEINENSYSTEME UND BREMSSYSTEME DAFÜR

Title (fr)

SYSTÈMES DE CORDE DE SÉCURITÉ À RÉTRACTATION AUTOMATIQUE ET SYSTÈMES DE FREINAGE ASSOCIÉS

Publication

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Application

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- US 3133608 P 20080225
- US 4580808 P 20080417

Abstract (en)

[origin: US2009211848A1] A lifeline system includes a lifeline and a drum assembly around which the lifeline is coiled. The drum assembly is rotatable about a first axis in a first direction during extension of the lifeline and in a second direction, opposite of the first direction, during retraction of the lifeline. The lifeline system further includes a tensioning mechanism in operative connection with the drum assembly to impart a biasing force on the drum assembly to bias the drum assembly to rotate about the first axis in the second direction. The lifeline system further comprises a braking mechanism in operative connection with the drum assembly. The braking mechanism includes a catch that is rotatable relative to the drum assembly about a second axis that is not concentric with the first axis. The second axis is operatively connected to the first axis so that the second axis rotates about the first axis in the same direction as the drum assembly when the drum assembly is rotating about the first axis. A center of mass of the catch is located in the vicinity of the second axis. The catch rotates about the second axis in the second direction when the drum assembly is rotated in the first direction at at least a determined angular acceleration to cause an abutment section of the catch to abut an abutment member of the lifeline system (for example, by moving radially outward a sufficient amount) and stop the rotation of the drum assembly.

IPC 8 full level

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CPC (source: EP US)

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